What is claimed is:

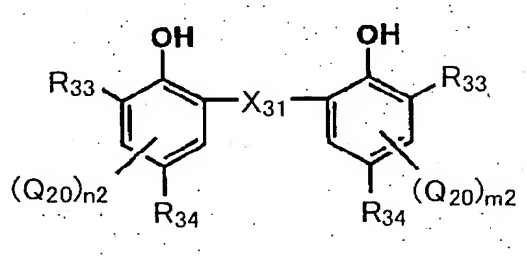
1. A photothermographic imaging material, comprising:

a support;

an image forming layer containing an organic silver salt, a photosensitive silver halide, a binder and a silver ion reducing agent, the image forming layer being provided on the support; and

a cyan coloring leuco dye,

wherein the photosensitive silver halide contains silver halide grains having a mean particle size of 10 to 50 nm, and the silver ion reducing agent is a compound represented by the following Formula (A-3),



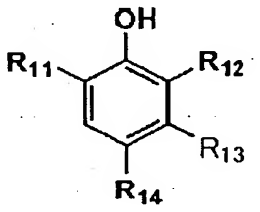
...(A-3)

wherein the X_{31} represents a chalcogen atom or a CHR, the R representing a hydrogen atom, a halogen atom, an alkyl group or an alkenyl group; each R_{33} represents an alkyl group, at least one R_{33} being a secondary or tertiary alkyl group; the each R_{34} represents a hydrogen atom or a group capable of being substituted on a benzene ring; each Q_{20} represents a group capable of being substituted on a benzene ring; and each of the m2 and the n2 represents an

integer of 0 to 2.

2. The material of claim 1, wherein the compound represented by the Formula (A-3) comprises an alkyl group having a hydroxyl group or a precursor of the hydroxyl group.

3. The material of claim 1, further comprising a compound represented by the following Formula (YA) on a side of a face having the image forming layer,



···(YA)

wherein the R_{11} represents a substituted or non-substituted alkyl group; the R_{12} represents a hydrogen atom, a substituted or non-substituted alkyl group or a substituted or non-substituted acylamino group, the R_{11} and the R_{12} being substantially free from 2-hydroxyphenylmethyl group; the R_{13} represents a hydrogen atom or a substituted or non-substituted alkyl group; and the R_{14} represents a substituent capable of being substituted on a benzene ring.

4. The material of claim 1, wherein an average gradation is from 2.0 to 4.0 at an optical density of 0.25 to 2.5 in diffused light on a characteristic curve shown on

rectangular coordinates where unit lengths of diffuse density (Y axis) and common logarithm exposure amount (X axis) are equal on an image obtained by thermally developing at a development temperature of 123°C for a development time of 13.5 sec.

5. The material of claim 1, comprising at least one silver saving agent selected from a vinyl compound, a hydrazine derivative, a silane compound and a quaternary onium salt in a side of a face having the image forming layer.

6. The material of claim 1, wherein a glass transition temperature (Tg) of the binder is from 70°C to 150°C.

7. The material of claim 1, comprising a compound represented by the following Formula (SF),

$$(Rf\text{-}(L_5)_{n1}\text{-})_p\text{-}(Y)_{m1}\text{-}(A)_q \quad \cdots\cdots (SF)$$

wherein the Rf represents a substituent containing a fluorine atom; the L_5 represents a bivalent linkage group substantially free from a fluorine atom; the Y represents a bivalent to quadrivalent linkage group substantially free from a fluorine atom; the A represents an anion group or a base of the anion group; each of the m1 and n1 represents an integer of 0 or 1; each of the p and the q represents an

integer of 1 to 3; and when the q is 1, the n1 and m1 are not simultaneously 0.

8. The material of claim 1, wherein the photosensitive silver halide further contains silver halide grains having a mean particle size of 55 to 100 nm.

9. The material of claim 1, wherein the photosensitive silver halide further contains silver halide grains which are chemically sensitized with a chalcogen compound.

10. The material of claim 1, wherein an amount of silver contained in the image forming layer is from 0.3 to 1.5 g/m^2.

11. A method for forming an image, comprising:

thermally developing the material of claim 1 by using a thermal development apparatus having a thermal development portion, an imaging material supplying portion and an image exposure section,

wherein a transport velocity of the material at the thermal development portion is from 10 to 200 mm/sec, a transport velocity of the material between the imaging material supplying portion and the image exposure portion is from 10 to 200 mm/sec, and a transport velocity of the

material at the image exposure portion is from 10 to 200 mm/sec.

12. A silver salt photothermographic dry imaging material, comprising:

a photosensitive layer having an organic silver salt, a photosensitive silver halide, a silver ion reducing agent and a binder, the organic silver salt containing aliphatic silver carboxylate; and

a cyan coloring leuco dye,

wherein 70 mol% or more and less than 100 mol% of the aliphatic silver carboxylate in the organic silver salt is silver behenate.

13. A silver salt photothermographic dry imaging material, comprising:

a photosensitive layer having an organic silver salt, a photosensitive silver halide, a silver ion reducing agent and a binder, the organic silver salt containing aliphatic silver carboxylate; and

a cyan coloring leuco dye,

wherein an average iodine content in the photosensitive silver halide is 2.0 mol% or more and 7.0 mol% or less, and 50 mol% or more and less than 100 mol% of the aliphatic silver carboxylate in the organic silver salt is silver behenate.

14. A silver salt photothermographic dry imaging material, comprising:

a photosensitive layer having an organic silver salt, a photosensitive silver halide, a silver ion reducing agent and a binder;

a cyan coloring leuco dye; and

at least one crosslinker selected from a group consisting of a vinylsulfone group, an isocyanate group and a carbodiimide group.

15. The material of claim 12, further comprising:

at least one crosslinker selected from a group consisting of a vinylsulfone group, an isocyanate group and a carbodiimide group.

16. The material of claim 13, further comprising:

at least one crosslinker selected from a group consisting of a vinylsulfone group, an isocyanate group and a carbodiimide group.

17. The material of claim 12, wherein coefficient of determination (multiple determination) R^2 of a linear regression straight line is 0.998 or more and 1.000 or less, the R^2 being made by measuring each density at optical density of 0.5, 1.0, 1.5 and minimum optical density on a

silver image obtained after thermal development processing of the silver salt photothermographic dry imaging material and by disposing u* and v* at the above each optical density on two dimensional coordinates where a horizontal and vertical axes in CIE 1976 (L*u*v*) color space are made u* and v*, respectively; and v* value of an intersection point with the vertical axis of the linear regression straight line is -5 or more and 5 or less; and a slope (v*/u*) is 0.7 or more and 2.5 or less.

18. The material of claim 13, wherein coefficient of determination (multiple determination) R^2 of a linear regression straight line is 0.998 or more and 1.000 or less, the R^2 being made by measuring each density at optical density of 0.5, 1.0, 1.5 and minimum optical density on a silver image obtained after thermal development processing of the silver salt photothermographic dry imaging material and by disposing u* and v* at the above each optical density on two dimensional coordinates where a horizontal and vertical axes in CIE 1976 (L*u*v*) color space are made u* and v*, respectively; and v* value of an intersection point with the vertical axis of the linear regression straight line is -5 or more and 5 or less; and a slope (v*/u*) is 0.7 or more and 2.5 or less.

19. The material of claim 14, wherein coefficient

of determination (multiple determination) R^2 of a linear regression straight line is 0.998 or more and 1.000 or less, the R^2 being made by measuring each density at optical density of 0.5, 1.0, 1.5 and minimum optical density on a silver image obtained after thermal development processing of the silver salt photothermographic dry imaging material and by disposing u* and v* at the above each optical density on two dimensional coordinates where a horizontal and vertical axes in CIE 1976 (L*u*v*) color space are made u* and v*, respectively; and v* value of an intersection point with the vertical axis of the linear regression straight line is -5 or more and 5 or less; and a slope (v*/u*) is 0.7 or more and 2.5 or less.

20. A method for recording an image on the material of claim 12, comprising:

performing image exposure according to a vertical multiple mode laser scanning exposure apparatus when recording the image on the material.

21. A method for recording an image on the material of claim 13, comprising:

performing image exposure according to a vertical multiple mode laser scanning exposure apparatus when recording the image on the material.

22. A method for recording an image on the material of claim 14, comprising:

performing image exposure according to a vertical multiple mode laser scanning exposure apparatus when recording the image on the material.

23. A method for forming an image after performing image recording on the material of claim 12, comprising:

thermal developing in a state containing 40 to 4500 ppm of organic solvent when forming the image on the material.

24. A method for forming an image after performing image recording on the material of claim 13, comprising:

thermal developing in a state containing 40 to 4500 ppm of organic solvent when forming the image on the material.

25. A method for forming an image after performing image recording on the material of claim 14, comprising:

thermal developing in a state containing 40 to 4500 ppm of organic solvent when forming the image on the material.